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ABSTRACT

This case study focuses on the Forsokgymnaset, Oslo, (FGO), Norway, which came into being as a new type of school without any influence from lifelong education but whose features, especially the emphasis on students' responsibility for their own growth, are applicable to lifelong learning. Chapter 1, an introduction to lifelong education, considers its rationale, key principles, administrative practices, pedagogical methods, and teachers' role. Chapter 2 briefly describes the country (Norway) by focusing on its most typical qualities and comparing it with other nations. A discussion of the FGO in chapter 3 places it within the Norwegian school system. Chapter 4 briefly outlines the plan, procedure, and objectives of this study. Chapter 5 presents results of the study--a description and analysis of FGO. These topics are discussed: process of setting goals, formal structure, internal milieu, managerial subsystem, social subsystem, and pedagogical subsystem. Chapter 6 is a postscript addressing these topics: FGO pupils and teachers, financial situation, school leavers, and the "Hawthorne Effect." (YLB)

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THE FORSØKSGYMNASET OSLO, NORWAY in the perspective of lifelong education

Sverre Øygarden
Olav Svartdal

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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FOREWORD

The purpose of case studies within the research programme of the Unesco Institute for Education is twofold:

1. to draw from existing educational practices and their conceptualizations a better understanding, fresh insights and more precise specifications of the principles of lifelong education;
2. to identify alternative ways of implementing such principles.

The programme uses a comprehensive interpretation of the notion of lifelong education as an ever continuing process. In this process all learning opportunities and styles have equally important and complementary functions. The main component of such a process is the learner himself, his permanent interest in learning and his increasing ability to do it. The goal of such a process is the securing of the knowledge, skills and attitudes required to meet with human dignity the continually changing conditions under which man finds himself living.

For practical reasons, however, the research programme is restricted to one period of this lifelong process, i.e., to the period of school level education. Within this limited range the case studies are expected to provide information on how the various components of school learning in their different aspects may best fulfil their specific functions within the lifelong process of education, i.e., how they may lay the foundations which will allow such a process to take place.

The Forsöksgymnaset, Oslo, came into being as a new type of school without any influence from lifelong education. The learning conditions realized in this school, however, coincide with several prevailing concerns of lifelong education, i.e., to develop the ability to learn, using a variety of modes and styles, and particularly the emphasis on active participation by the pupils in the various aspects of learning such as identi-

fication of what should be learnt, familiarity with the possible avenues and means leading to this, and experience in using those various means appropriately.

The UIE was fortunate in being able to rely not only on the professional interest and dedication of Professors Svere Øygarden and Olav Svartdal, but also on the support of this remarkable school and its pupils and staff. Finally, a word of thanks to Professor A.J. Cropley who has contributed to this manuscript with the chapter on Lifelong Education. It may well be that the features of the Forsöksgymnaset are not easily reproduced elsewhere, but they certainly show that alternatives to the pattern commonly applied in the schools exist, and that such alternatives under certain conditions are not merely feasible but highly successful.

M. D. Carelli
Director
Unesco Institute for Education

CHAPTER 1

AN INTRODUCTION TO LIFELONG EDUCATION

1.1 The Rationale for Lifelong Education

People learn throughout their lives. This was true before the emergence of current interest in lifelong education and would remain true even if formal education ignored the fact. Of course, learning in this sense is not restricted to the kinds of learning which take place in schools, nor does it lead only to the acquisition of academic information. It is a broad process leading to self development, even self actualization, and goes far beyond learning as it is traditionally understood in formal education systems. It is also true that learning is affected by a whole spectrum of influences, and not just by what happens in schools, universities, and similar institutions. These influences range from the highly systematic and organized (such as conventional schools) to the unsystematic and unorganized (such as a parent playing with a child). Learning is thus something that lasts a lifetime (it is lifelong) and is modified by the whole range of influences encountered in the course of living one's life (it is "lifewide").

Although it has long been recognized that learning goes on throughout life and that it is acted upon by influences other that those with a specifically educational purpose, there are grounds for believing that systematic and purposeful learning throughout each person's lifetime and in close co-ordination with day-to-day-life is now more important than ever before. This is because of the extremely rapid change that is occurring in contemporary society: change in job skills, change in interpersonal relations, change in social standards and norms, charge in technology and science, and so on. Change is now so rapid and pervasive that the idea of learning everything required for the rest of one's life during childhood and within the confines of the formal education system has become unsatisfactory.

Learning needs more than ever to be linked to the events of everyday life and to make use of all the learning resources of society, while it is more important than ever that people learn in a purposeful, systematic way throughout their lives. This conceptualization of the need for learning in today's world requires, in turn, deliberate and conscious support for lifelong and lifewide learning - it is the provision of such a support with which lifelong education is concerned.

1.2 The Key Principles of Lifelong Education

Lifelong learning. Lifelong education has three main ideas. The first is that education cannot be confined to childhood and adolescence. Learning occurs throughout life, and indeed is now necessary throughout life, and should be identified, acknowledged and supported by a corresponding system of lifelong education. This means that learning at any age should be coordinated with both prior and later learning (i.e., it should be "vertically integrated").

Lifewide learning. The second key idea is that learning should be clearly related to life itself. For example, many important learning experiences do not occur in schools at all, but involve the events, institutions and people of everyday life. Consequently, the place of work, libraries and museums, community organizations, recreational facilities and groups, political parties, churches, and many similar agencies should be acknowledged as making important contributions to learning, and therefore as elements of education conceived of in a broader way. Similarly, people such as parents, peers, fellow workers, and many others make a major contribution to each person's learning, and should be acknowledged as important teachers, again in the broadest sense of the word "teacher".

Personal pre-requisites. It is clear that people cannot be expected to spend their entire lives in school. Consequently, lifelong education cannot mean lifelong *schooling*. Thus, the third main issue is that of how to encourage people to engage in a process of lifelong and lifewide learning without being subjected to the supervision and structuring provided in school. This can be seen as a matter of how to foster the emergence of the personal properties people will need if they are to engage in purposeful learning throughout their lives and in many different settings - what may be called fostering of the "personal pre-requisites" for lifelong learning. These

include skills, motivation, values and attitudes, and self image. A process of lifelong education would address itself to the question of how to promote the growth of such personal prerequisites.

1.3 Lifelong Education and Schools

Some writers have concluded that acceptance of lifelong education would mean the abolition of schools, or "de-schooling", as it has been come to be known. However, this view is now widely rejected. Instead, schools are seen as assuming new roles and responsibilities. Traditionally, they have been regarded as offering an education which is terminal: learning, except in an unsystematic, incidental sense, has been seen as ending when formal schooling ceases. The education offered in schools and other institutions of similar kind has also been regarded as complete: on graduating from school, children or young adults have been treated as having learned everything worthwhile that they will ever require. In contrast to these two views, proponents of lifelong education argue, on the one hand, that school is merely a stage or phase in an ongoing process of education which will continue throughout life, and, on the other, that school and school related institutions are merely part of the total range of influences from which people learn worthwhile things.

This conceptualization has a number of practical implications. For example, it would mean that pre-school, school and post-school learning would be inter-related, as would learning at different grade levels within a school. In the lifewide sense, there would be co-operation or integration between school and external influences such as home, community, work, cultural activities and the mass media, as well as internal integration of subjects within the curriculum, integration between curricular and extra-curricular activities, and integration of learning activities of pupils having many differing characteristics such as different race or religion, different mental or physical endowment, different social characteristics, and the like. In the case of the pupils, schools would be oriented towards fostering personal characteristics which would contribute to self growth, such as self understanding, achievement motivation, internalized criteria of evaluation, and interest in and positive attitudes towards the novel and unknown. This would have as its purpose the fostering of the capacity for self directed learning and the achievement of a greater degree of equality and democracy in the process of education.

1.4 Administrative Practices

When viewed in this way, schooling is seen as a means for achieving integrated learning in the sense that has just been explained, and for fostering emergence of the kind of characteristics thought to be necessary for such learning, not as an end in itself. Administrative practices are one of the means through which schools can pursue this goal. They will need to be flexible, to be capable of tolerating a variety of methods and forms of learning, to foster co-ordination of learning at different ages and in different settings, and to promote the responsible participation of learners in the management of their own learning.

Once again, these principles have practical implications. For example, preconditions for entry to various stages or programmes would be expected to differ from those which emphasize formal qualifications and/or age. Students might, for example, be admitted without possession of formal certificates obtained in earlier stages of school. It would not be surprising to see people of many different ages among the student body. This could be facilitated by keeping the school open in the evening hours or at weekends, to permit some students to be simultaneously involved in the work and school worlds. The possibility of "dropping out" and "dropping back in" after a period spent out of school, possibly while working, might be available to all pupils. Organizations from outside the school, private persons, or representatives of public life could well be involved in the school's learning systems, for example through provision of practical experiences as part of courses of study, through their function as sources of information, through lectures, through their participation in projects and so on. Programming, time-tabling and scheduling of school work and other extra- and co-curricular activities would be expected to be organized in such a way as to permit unconventional courses of study, which were in line with essential goals of the school.

In the area of internal governance, a school organized along the lines of lifelong education would be expected to employ democratic forms of decision-making. For example, students would share in decision-making, both to make it possible for their views to be represented, and also to give them experience in planning events likely to shape their lives. They would also thus become more directly responsible for what eventually happened to them, with a consequent reduction in the sense of helplessness and alienation which has been argued to be one of

the threats of contemporary life. On the other hand, the community is also deeply concerned with what happens in schools, while it has already been argued that schools should be closely linked with life. Thus, it would be expected that governance would involve parents, members of the public, and representatives of the work world, such as officers of trades unions and employers.

1.5 Pedagogical Methods

A major emphasis in lifelong education is on the kinds of skills which are sometimes referred to as involving "learning to learn". One of school's most important purposes would be that of aiding in the development of people who were capable of setting their own learning goals and pursuing them with minimal direction and supervision - the development of self-directed learners. Thus, there would be great emphasis on activities such as setting goals and finding and using information. At the same time, however, learning and education is a social activity with social purposes. Though it is the individuals who are educated, they are educated by others, for living in society. pupils will need to learn how to learn and to work with other people, how to set and follow group goals, how to help others to learn and live, how to learn from others and so on. Thus the processes of group learning would not be neglected. This indicates that there would be much emphasis on joint planning assignments, working in teams, and similar activities.

A major purpose of school learning in the context of lifelong education is learning for the purpose of dealing effectively with life and with the problems and needs of living in the real world outside the school. Thus, students would be expected to recognize the importance of the community and its various organizations and structures as important sources of information. At the same time, there would be emphasis on the relevance of learning in school to living one's life, and similar emphasis on the ability of experiences with parents, peers, employers, recreational agencies, cultural bodies and similar groups to aid in the solving of school problems. Pupils would be expected to be capable of relating their school learning to the issues and problems of real life, and conversely, of relating learning in life to activities carried on in school.

Lifelong education also stresses the need to establish internal criteria judgement. This suggests that pupils should

be skilled in identifying their own needs, assessing their present status, adopting goals on the basis of this assessment, planning the steps required, and monitoring their own progress. Where possible, they would be asked to evaluate their own efforts, and to take responsibility for those evaluations. Thus, a school oriented towards lifelong education would attempt to foster the capacity for self evaluation in students.

On the other hand, the importance of working with other people and of learning with and from others has also been emphasized. Consequently, evaluation would also on occasions be a group process in which individual learners make judgements about each other, or about the group as a whole, while on some occasions members of a group might combine to evaluate other people or themselves, through the processes of group evaluation. Thus, an attempt would be made to foster self evaluation, participatory group evaluation, evaluation of groups by individuals, or various forms of co-operative evaluation, one of which might include evaluation with the assistance of a teacher.

1.6 The Role of Teachers

Lifelong education has implications for the role of teachers. It is important to realize that teachers and schools are not inextricably interrelated. In fact many people who are not specifically trained, recognized and paid to do so function as teachers. For example, librarians, social workers, guidance counsellors, even doctors and chemists, all play educational roles, as do parents, fellow workers and many others who possess special, useful knowledge. In a lifelong education context, with its emphasis on educative agencies and persons in the society, and not merely in schools, the teaching function of such people would be acknowledged and strengthened.

In the school setting, however, new roles and functions for teachers can be expected to emerge. For example, teachers will themselves be expected to be lifelong learners, since they will have to be leaders in the process of adjustment to change. Teachers will thus become co-learners with their pupils. In helping pupils adopt a creative attitude to new situations and fostering in them a desire to come to grips with the effects of change and deal with them effectively, in fostering the skills of learning to learn, self-directedness, and self-evaluation, teachers will have to give up their traditional role as authoritative bearers of wisdom. They will become educational con-

sultants or leaders, who will guide and co-ordinate students' learning activities, but not dictate them. This suggests that they will have to be available for consultation and discussion, and that they will have to be willing to work out goals jointly with students, either individually or collectively, justify their decisions and judgements, and be open in their relationships with their pupils. They will also have to be able to indicate to pupils where knowledge may be obtained, provide feedback when it is needed, organize and co-ordinate learning opportunities, link classroom activities with real life, and so on.

1.7 Lifelong Education and the Forsöksgymnaset

Emphasis at the Forsöksgymnaset, Oslo (FGO), is on fostering the self-growth of pupils, so that they become aware of their responsibility for their own growth as well as better aware of their own capacities, and interested in and aware of new areas and forms of personal development. This requires, among other things, development of internal criteria of judgement, which is possible when learners possess standards according to which to judge, are able to formulate opinions independently rather than looking to authority to provide them, and have a realistic appreciation of the strengths and weaknesses of their opinions and judgements in various areas.

Fostering of self-growth requires development of learners' own competencies for planning, executing and evaluating learning, both as individuals and also in groups. Activities at the FGO which have been adopted for this purpose include participation in joint planning, learning in groups, learning from other learners (interlearning), co-operative evaluation, and similar activities, as well as individualization of learning by adapting it to individual levels of ability, individual learning tempi, and different patterns of interest. Administrative procedures have been modified in order to achieve greater democratization. This has been done for example by sharing decision-making among all participants in the learning process, regardless of unequal status such as traditionally exists between teachers and pupils, exercising authority humanely so that, for example discipline reflects a consensus among teachers and pupils, and encouraging flexibility, for instance through the encouragement of alternative modes of learning or of expression of ideas.

This means that, at the FGO, there have been changes in the idea who is a learner and what constitutes valuable learn-

ing, who is a teacher and what constitutes teaching, and in what education consists and how and where it occurs. These various changes were not adopted specifically with lifelong education in mind. Nonetheless, they provide examples of the kinds of practice which would be needed if the ideas of lifelong education were to be put into effect in the ongoing life of a working school. They thus cast light on questions such as "What is self-directed learning?", "How can it be fostered in the school?", "How could the properties necessary for lifelong learning, such as appropriate skills, motivation for continuing learning, positive attitude towards learning, and favourable self image, be fostered?", "How could a school be organized and administered in order to foster development of the above qualities?". For this reason, the FGO has the potential to make a valuable contribution to practical understanding of what is meant by lifelong education.

CHAPTER 2

NORWAY: THE COUNTRY IN BRIEF

The task of describing a country can be solved in different ways. The traditional method is to describe the country's history, geography, government, population, etc., hoping that the reader is able to extract the most important information from such a survey.

A shorter and more direct way is to describe what are considered to be the country's most typical qualities. The condition of succeeding with this last method is either that the writer has an idea of what these typical traits are like, or that there are sources written by authors with such a perspective. In this case we are lucky to have such a source in the article "Norge i verdenssamfunnet" (Norway in the World Society) by J. Galtung and N.P. Gleditsch (1975).

Galtung and Gleditsch pose the question what countries are used as a reference group in political discussions in Norway. The countries they found most often mentioned as models for the development of Norwegian society, are: Sweden, Great Britain, USA, Denmark, West Germany and Finland. A comparison between Norway and these countries is not especially flattering for Norway; it rather stresses the fact that Norway is a small country. Even so we use these countries as models, and the conclusion must be that the Norwegian level of aspiration is high.

A more interesting tendency, however, is found when Norway is compared with other nations. A striking fact is the unevenness of the Norwegian profile. Norway holds a middle place for size (386.000 square km), population (4 millions), and gross national product. Several indicators of developmental level give Norway a high position. On the other hand, Norway has had poor resources suitable for traditional industrial production, but in spite of this has developed into an industrial society.

In recent years the outlook for resources has changed because of the development of cheap electric power from the country's main waterfalls, and because of oil from the North Sea. Galtung and Gleditsch mention several qualities in their description of Norwegian society. We have chosen just a few and will give brief comments on each of them.

Norway is a developed country. Norway belongs to the rich nations of the world. If we use the GNP per capita as an indicator of wealth, Norway is No.11 out of 120 nations.

Norway has a high standard of general education. Norway is one of the very few nations which have reduced illiteracy to less than 1%. All Norwegian children have compulsory education for nine years. About 30% of the age group of 19 years pass the final examination in the upper stage of secondary schools, which gives entrance to a university. Educational activity at college and university level has increased in the last few decades (in 1976 there were nearly 68,000 students), but the amount of money given for research is not especially high in Norway.

Norway is an egalitarian society. Seen in an international perspective the statement is true as to distribution of income, and even more so if we look at the net income. Privileges by heritage are in principle reserved to the King's family. Privileges are of course not so easy to distribute as money, but compared to many other countries, Norway is an egalitarian society also in this respect.

Norway is a homogeneous society. In both language and religion Norway is a very homogeneous society. Though there are many dialects and two written variations of the Norwegian language, we can say that all Norwegians speak the same language except the Lappish minority. The dominant religious denomination is the Lutheran, and 94% belong to the same church.

Immigration and emigration have been on a low level in this century. During the last few years some refugees and workers from different parts of the world have come to Norway. In such a small country even a small minority of immigrants is noticeable.

Norway is a singularistic society. Galtung and Gleditsch claim that Norway must be one of the most singularistic societies in the non-socialist part of the world. We have just one school system, one dominant church and one broadcasting corporation. Private schools are rare in Norway, especially at the

primary level. There are of course economic reasons for not having parallel school systems in so small a country. But the government's unwillingness to accept private schools is more often founded in egalitarian and democratic ideas.

The impression of a singularistic society is strongest when we look at its institutions from the outside. When looking beneath the surface, several pluralistic traits may detect not only in the school, church and radio/TV, but perhaps even more when main ideas from the several institutions confront each other, e.g. the church's view against predominant ideas in the mass media.

In this century there has been a strong migration from rural districts to the Norwegian towns and cities. Mobility was especially strong after the Second World War. Today 33,6% of the population have manufacturing as the main source of livelihood. The corresponding percentages for agriculture and fishing are 7,7% and 1,8% respectively.

Most of the country is sparsely populated. The capital and the adjacent districts are the most densely populated. Oslo (460,000) and the county Akershus (361,000) represent about 20% of the total population. The history of Norway as a democratic society goes back to 1814. Except during the period of the German occupation from 1940 to 1945, Norway may be characterized as a stable democracy. Norway is a welfare state with a well organized health service, and with family allowances and different insurances. Unemployment has up till now been held to a low level.

CHAPTER 3

THE FORSØKSGYMNASET WITHIN THE NORWEGIAN SCHOOL SYSTEM

3.1 The School System in Norway

Compulsory education in Norway is for nine years, from seven to sixteen. The primary school includes grade one to six, and secondary school the three last grades. Some schools have all grades from one to nine, but the most common arrangement is to have primary and secondary schools separate.

When the educational reform started twenty years ago, the government was much in favour of school centralization. Some of the small schools were closed, and the pupils transported to central schools. Especially in the rural districts this centralization was carried through against the will of most parents.

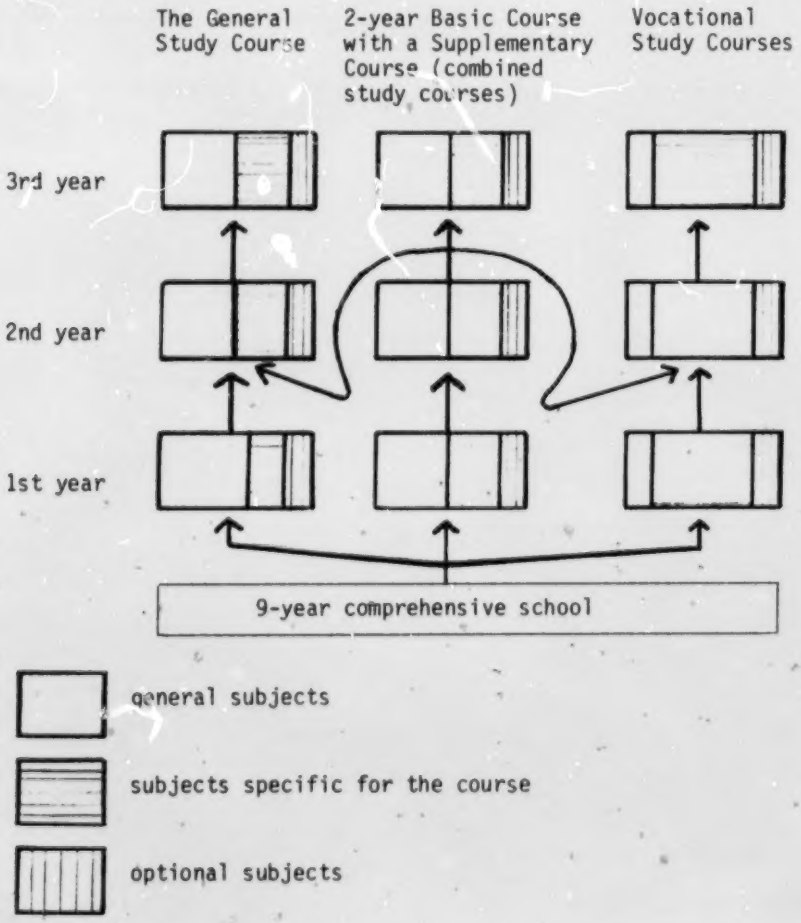
The new comprehensive school started as a school with three streams. This system is now abandoned, and the school is today in principle unstreamed. The pupils still have the choice to take or not to take a second foreign language, but most of the time is spent studying compulsory subjects. The pupils get no marks at the primary level. At the end of grade nine, they have a written examination in one of the three main subjects Norwegian, English or Mathematics.

For some years there has been strong opposition to the segregation of handicapped pupils, and in 1975 the School Act of 1969 was revised in such a way that most of the handicapped children should have the possibility of getting their education in ordinary schools.

The administration of schools is the responsibility of the local school board. Teachers are appointed by the local board, and the government covers from 25% to 85% of the expen-

diture. The local board seems to have a strong say in running the schools, but the rules which regulate the local board's decisions, are mainly centrally determined. Therefore the Norwegian school system is best characterized as a centralized school system.

In 1974 the Norwegian Parliament passed the Upper Secondary School Act. The act came into force in 1976. The following diagram may illustrate the structure:



All schools are referred to as further education schools, and the aim is to give all young people who want it, the possibility of twelve years of education.

Private schools are rare in Norway. At the primary level will be found less than 1% of the pupils in private schools. At the upper secondary level about 3% of the students attended private schools some years ago, and today the percentage is even lower because of the increase in the total number of students.

3.2 Historical Sketch of the Forsöksgymnaset

The history of the Forsöksgymnaset in Oslo is quite a remarkable one. In March/April 1966, three young high-school pupils in Oslo started a campaign to establish what they called a "free gymnas". The young people, two boys of 16 and a girl of 15, were all very dissatisfied with the traditional school they went to, and they decided to do something about it. A pamphlet was written and distributed to all the high-school pupils in the Oslo area. Copies were also sent to the press, the municipal authorities of Oslo and the Ministry of Education.

In this paper the three pupils stated their opinion of the traditional school: "a school organized in an authoritarian way with the teachers as the only judges, a school with rigid rules and dead methods of teaching, a school which serves the purpose of adjustment to an out-dated authoritarian system, and where the pupils' personality and independence do not count".

The consequences of this authoritarian system are that the relationship between pupils and teachers is impersonal and often nearly hostile. Friendship between the two parties is rare because the pupils' solidarity is turned against the teachers and vice versa. The discontent and lack of freedom in this relationship reduce the activity of both parties.

After drawing this sketch of the traditional school, the three pupils proclaimed the idea of establishing a new high school in Oslo. In this school pupils and teachers would have equal rights, and together they would decide the necessary rules of the school and judge when rules were broken. Instead of having the teachers controlling the pupils' attendence and homework, the school should be built on responsible confidence and cooperation.

The very first response the three pupils received, was from a prominent person, a professor of philosophy at the University of Oslo. In a few days about 60 more responses from teachers and pupils reached the group. By now they realized that their critique of the traditional school and their proposal to establish a new school were taken seriously.

A working group was set up where both teachers and pupils worked together. In the beginning there was obvious disagreement about the procedure. Some felt that they should try to do something within the framework of the traditional school. Others felt that the most important task was to change the very structure and distribution of power, and that it would be impossible to realize their ideas within the old rigid framework. The crucial point was whether the pupils should have a really decisive role in the school, or whether they should only have the opportunity to participate in decisions concerning specifically pupil affairs.

The most radical standpoint was chosen by the majority of the group. The consequence was that some of the more moderate teachers left the "movement". A formal proposal about establishing a new school was sent to the Ministry of Education, but the working group had to rewrite the application several times before they were able to convince the Ministry that the experiment was of any interest and really worthwhile.

Just at that time a number of experiments were planned in the Norwegian high-schools, which the Ministry of Education and the Advisory Council for High Schools thought would be the best strategy for innovation and reorganization of the traditional school system. The Teachers Union for High-School Teachers which had shown strong interest in school-innovation, supported the standpoint taken by the Ministry. A quite passionate debate went on for some time concerning the desirability of establishing a new school. However, the Ministry at last gave their consent, but they had no financial support to offer. The problem was solved when the community of Oslo offered to pay all the costs of the new school.

The FGO started in August 1967 under very difficult conditions, in an old school building with outdated equipment. In addition the school attained only an interim status. The Ministry defined the school as a "private" school run by public funds. The consequences were that a pupil had to take the final examination in all oral and written subjects at one of the

official schools. Because of this the FGO got limited opportunities of developing a curriculum different from the traditional school.

One privilege, however, was given the FGO concerning its financial support. In connection with funds granted by the central or local school authorities, there exist quite rigid restrictions. It is not permitted to transfer funds from one head to another within the budget without permission from the authorities. The FGO received its funds as a block vote which they could distribute according to their own decisions.

The financial support for the first year was 760,000.- N.kr., enough to cover teachers' salaries, rent, equipment and teaching materials for a school with 150 pupils. The actual number of pupils the first year was close to 150. Some years later the number increased to about 180, but during the last few years the number has decreased again and is close to 150. Compared to the other high schools in Oslo, the FGO is quite a small school. The usual size of a high school in this area is 500 to 700 pupils.

The majority of pupils come from different parts of Oslo, but quite a lot have also been recruited from near-by districts (40% in 1970-71). When the Forsöksgymnaset i Baerum (a community not far from Oslo) and some other high schools were founded in the district outside Oslo, this percentage diminished.

As for the social background of the pupils, there are some differences between the FGO and other high schools in Oslo. In 1970-71 nearly half of the pupils at the FGO had parents with academic backgrounds. The corresponding percentage for all high schools in Oslo was 25%. Also compared to the average for the whole country, the percentage of pupils from academic homes was high, and from the working-class was low.

During the first year there were as many as 32 teachers at the FGO, most of them part-time teachers. The job of teacher at the FGO was not considered too secure or permanent, because nobody could tell how long the school would exist. Most of the teachers during the first year were young and quite inexperienced. During eleven years the staff has changed, of course, but some of the teachers have stayed. Even today you can still meet some of the "pioneers" at the school. Most of the teachers are now full-timers, and the school has no difficulty in getting the teachers they need.

As mentioned above, accommodation for the first year was very bad. In an old school building they had six class-rooms on the first floor and a bigger room on the second floor. The administration office was located in a corner of one of the class-rooms, and divided from the rest of the room with thin walls. Even the corridors were used for group meetings and different activities.

This distress did not last more than a year. The FGO was then offered a building not far from the centre of Oslo. The building was old, originally built as a residence for the headmaster at the old and very traditional "Oslo Katedralskole". In such a building grew up a revolutionary school, reminiscent of "new wine in old bottles". It is said that such a combination cannot last in the long run, and indeed it did not. The ground was meant for a new building, and eight years later the FGO had to move again.

The FGO pupils at that time felt their removal like a banishment. The old building was perhaps not so well suited for educational activities, but the pupils felt well in it and liked it, and they fought to stay there and to save the building. When the last word was said by the authorities, pupils occupied the building, and the police had to throw them out before the big machines could move in to destroy it.

The building where the FGO is now located is another old building. There is more space, but the accommodation is not fully satisfactory. The frustration, however, which resulted from the fight and the removal seems to have disappeared, and the school is again in full activity.

The Head Teacher of the FGO is in a special position. The first Head Teacher who was appointed proposed that her salary should not exceed the other teachers' salaries. The reason for this proposal was that nobody should stay on in the position of Head Teacher for years, for the sake of money. The FGO has up to now had five Head Teachers, which means that each of them has stayed in the position for only a couple of years.

The Head Teacher at the FGO is responsible to the government and the local school authorities. His duties are to lead the school from day to day in conformity with the guide-lines given by the School Council and the General Assembly. Compared to the power of a Head Teacher at an official high school in Norway, the power of the headmaster at the FGO is quite limited.

The School Council is actually the executive board. It consists of four pupils, three teachers, the head and one representative of the parents. The representatives of the pupils and the teachers are elected by all the pupils and all the teachers respectively. The Council is elected for half a year, and the chairman and secretary are appointed by the members. Six members make a quorum to pass resolutions.

The School Council makes proposals on subjects which are to be discussed at the General Assembly. In educational questions, in matters connected with the school subjects and experiments, the Council should always be heard before the discussion in the General Assembly. If two members of the Council agree to put up a subject for discussion, it will be taken directly to the General Assembly.

The teachers of the FGO are appointed by the Ministry of Education, but the School Council has the right to propose them, and no teacher can be appointed without this proposal from the Council. A teacher's appointment is limited in time. The Council is also responsible for the intake of new pupils.

If a member of the school does not behave in a social manner, or do his work, and if he does not show any sign of improvement when he has been cautioned and counselled, he forfeits the claim to be a member of the school for the next term. The member has the right to be present at all meetings concerning his case. The Council is responsible for all such decisions.

The School Council's meeting programme must be publicised before each meeting. Decisions can be made with an ordinary majority vote. The meetings in the Council are open to all members of the school. Decisions made by the Council go to the General Assembly when two members of the Council demand it.

The General Assembly has the real controlling authority at the FGO. Questions concerning the policy of the school and the welfare of the members, should be discussed in the Assembly.

The General Assembly includes all the members of the FGO. It is led by a Committe of five, one of whom should be a teacher. The committee has a representative in the Council, but without the right of voting. The Committe is elected for one term.

The committee is responsible for arranging the General Assembly meetings, and for preparing whatever is to be discussed there. The meeting programme should be presented two days before the time of meeting. Voting by ballot should be used when two members demand it. Ordinary majority voting is sufficient to pass resolutions. Decisions can be delayed by the Council's veto just once.

These rules can be changed by two thirds of the votes in

General Assembly, but it is necessary for this to be done at two separate ballots a month apart.

In addition to the General Assembly and the Council, there are certain groups that assist in the development and administration of the school. These are all appointed by the General Assembly. The *Information Committee* aims to disseminate information about the FGO to other schools and to the newspapers. The *Ped-Group* discusses and formulates innovations in the school's curriculum and teaching methods. The *Admission Committee* reviews applications from those interested in attending the school, and advises the Council as to who should be admitted. The *Budget Committee* helps with drawing up the school's budget and prepares the official application for funds from the local school authorities in Oslo. A school newspaper gives information to the whole school about proposals and decisions taken at different levels in the school organization.

The FGO has aroused strong interest, first of course in Norway, but later perhaps even more in other countries. The discussion in Norway was especially passionate for the first year the school existed. The attitude to the school varied with the political opinion of the debater. The conservative parties were more sceptical about the experiment than the socialist parties. The leading newspaper in Norway *Aftenposten*, criticized the school for being radical and revolutionary. Others felt it would just be a place for long-haired young people in opposition to society.

A couple of reports about the school were published in November-December 1967. The reaction to these reports was of such a kind that the FGO's very existence was in danger. The school was discussed not only in the newspapers but also in the Norwegian Parliament.

For the school itself it was a difficult time. Both teachers and pupils at the FGO felt insecure, and the school went through a serious crisis. To defend it some became even more vigorously engaged in trying to make the experiment a success, and this created a strong feeling of solidarity.

The school got through the crisis and survived. The next serious crisis (in 1976) was when it had to move from the old building - Hammersborg, as already mentioned above.

The underlying principle for all educational activity at

the FGO could be called a system of responsible agreement. It is expected that the pupils enter into an agreement with their teachers concerning the amount of written work to be handed in, its frequency and the question of class attendance. If a pupil wants to work individually, he makes an agreement with the teacher and this agreement is considered binding.

The teachers at the FGO admit that this is the aspect of the school that functions least satisfactorily. They cannot (and do not wish to) force their pupils to attend classes or work on their own subjects. The pupils come from more authoritarian junior schools, and many of them need a long time before they can function effectively in the free, permissive atmosphere of the FGO.

With the examination at the end of the school year, the two terms come out quite differently. There is a tendency for the school to function as an experimental institution before Christmas, but when school reconvenes after the Christmas holidays, the spectre of the examination begins to grow larger and larger until almost all activity centres on examination preparation.

The FGO wanted from its very beginning to have its own curriculum independently of the official school system. In 1973 they submitted a curriculum plan to the Ministry. At that time the plans for a new high school system were almost finished, and the Ministry did not want another variation. It therefore responded negatively, and added that the new plans would probably give FGO satisfactory opportunity for pedagogical development. FGO therefore changed to the new structure in 1974, and has now had four years of experience with these curricula.

Present Curriculum Discussion at FGO. The curricula give each individual school great freedom for developing optional subjects, and FGO has used this freedom as far as the capabilities of the members have allowed.

Even so there is some dissatisfaction among members of FGO at the present pedagogical situation. Just a few of the pupils join in common learning activities; most of them are engaged in private study and preparation for the examination. There is not much surplus energy for concern with one's fellow pupils.

The dissatisfaction expressed by a group of pupils is

directed not only against organizational problems generally, but also against the present schedule, the departmentalization of subjects and interactional difficulties during periods of instruction. They hold that the division of subjects causes a loss of perspective and of connections between different subject matters that really belong together. Their knowledge therefore tends to be academic and hardly transferable to real life.

The members agree that amendments have to be made, and that a possible solution might be to organize the instruction around interdisciplinary topics, integrating parts of the subjects relevant for the examinations. The topics would have to be formulated with a view to motivation on the part of the pupils. There is, however, disagreement about the practical implementation of such a plan. The teachers and the group of pupils involved (10-20 pupils) have differing opinions: The teachers, who have had both successes and failures in their experiments with topics as the major part of the programme, think that projects of that kind may draw too heavily on their capacity. They think a more realistic plan would be a more moderate integration on the basis of a conventional schedule that automatically comes into effect when a project does not work satisfactorily. Thus the teachers want to ensure that the pupils always have a teacher at their disposal.

The pupils on the other hand, interpret this caution on the part of the teachers as a kind of scepticism, and think that a "schedule for safety" will undermine the pupils' willingness to engage purposefully in the integration efforts. "All or nothing" is how they put it.

3.3 Sources of Influence

In search of the philosophical foundation of the FGO, we find that the two boys of sixteen who started the campaign for establishing a new school, had quite advanced interests in literature. They had read works written by Plato, Rousseau, A.S. Neill and the Norwegian educational writer Olav Storstein (Jørgensen, 1972, p.15).

If you look at the first pamphlet which was distributed in 1966, the predominant characteristics are:

1. a strong reaction against the traditional high school (looked upon as an authoritarian school);

2. demand for more freedom for pupils, and
3. the idea of a thoroughly democratic school with equal rights for pupils and teachers.

It may be of interest to notice that this happened a couple of years before the outbreak of the students' revolution in Paris in 1968.

The idea of school democracy is the essential idea in the pamphlet. The genuinely educational ideas are more vague. But as more experienced and more mature persons joined the movement, the main idea of school democracy was supplied with more specific educational ideas. These ideas are not always expressed in written form, but if you observe groups and classes at the FGO, you may detect some of the leading characteristics:

1. co-operation and a collective attitude are stressed at the FGO;
2. the pupils are expected to be responsible for their attendance and for their own learning;
3. group activities and project teaching are highly esteemed (but are also used together with more traditional teaching methods).

Principles like these are well-known from different educational reform movements, and to indicate specific sources of influence is not easy. We will therefore very briefly outline possible sources of influence. Educational reform movements were known and discussed in Norway in the period between the two world wars. There were enthusiastic spokesmen like Ribskog and Anna Sethne, and some of the most prominent educational thinkers like Kerschensteiner, Elsa Kohler and Helen Parkhurst visited the Scandinavian countries. Their ideas for reform have certainly had an impact on the Norwegian school, but especially at the primary level.

In the twenties the Marxist ideology had quite a strong position among persons with academic background. One of the more prominent with an interest in education was Olav Storstein. As a teacher in a secondary high school he carried out some educational experiments. He was a well known writer, and it is likely that Storstein has influenced some of the supporters of the FGO. Some of the private schools in Denmark may have been an inspiration to the founders of the FGO, and especially the experimental school of Kragh-Müller.

A.S. Neill seems to have been one of the more significant sources of influence to the FGO. Summerhill school is mentioned by the first Head Teacher at the FGO as a model for her own thinking. It is noticeable that both Summerhill and the FGO are very much concerned with pupils who do not adjust well to the official school system.

CHAPTER 4

THE STUDY

4.1 Plan, Procedure and Objectives of the Study

It is hoped that the present case study of the Forsöksgymnaset will fulfil several objectives. First, it is of interest to investigate a practical school experiment to throw light upon certain aspects of the idea of lifelong education. Secondly, we hope that the insight and understanding of educational processes which this study can give, may provide guidance to educators in different countries who are interested in reforming educational practices in the light of these ideas. Thirdly, it is also hoped that FGO itself may benefit from this study in that they may use it in their process of self-evaluation.

The initial steps in carrying out the present study were taken by the Unesco Institute for Education in Hamburg. The project leaders agreed to undertake the conducting of the study, and the General Assembly of the school gave its consent to the project being carried out.

After a preparatory phase in which relevant literature was collected, a planning meeting was held at the UIE in Hamburg in January 1977. One of the teachers, Astrid Kjaer, and one of the pupils of FGO, Jon Jerstad, took part in the planning meeting, where the objectives and scope and an identification of the most appropriate research methods were discussed. To secure and maintain a good relationship with the school, we deemed it important to choose research methods which the involved teachers and pupils felt would not interfere with the principles of the school. It was also stressed that we should choose an approach that would not give an oversimplified description of an institution like FGO whose crucial features are change and development.

A rewarding step seemed to be the establishment of a

"reference group" of pupils and teachers at FGO. The task of this group should be to discuss and describe the features of the school which are or are not in line with the ideas of lifelong education. Subsequently such a group was formed. It was composed of volunteers: it contained from 8 to 12 members per meeting, and met five times in all. The "reference group" proved to be a very good source of ideas about the school and a forum for discussing the problems formulated by the project leaders. Besides, the group was itself an example of how a group of FGO-members may function.

The data collection was made mainly from non-participant observation of lessons, discussions and decision-making in School Council and General Assembly meetings, and of recreational activities. In all, about 20 hours were spent in such observation. The school has nine classes at three grade levels. Of these, five were observed. These five classes, which the teachers believed to be representative of the school, covered all three grade levels.

Data consisted of notes containing impressions of:

1. general relationship between members of the school as it was expressed through characteristic communication styles;
2. structural and functional aspects of the organization as they were revealed through the processes observed in the different groups;
3. the educative processes within the framework of the types of relationship and interpersonal attitudes found in FGO.

4.2 Theoretical Position - the System and Communication Approach

In our exploration of FGO and the idea of lifelong education we have chosen an approach which uses the theory of open systems as an analogue for schools. By this approach we try to attain a total view of the organization and to avoid attaching too much significance to simple cause-effect connections.

To look upon a school as a *system* implies the application of a perspective which brings out that all the components inherent in the school as an organization, have an interactional

relationship to each other, i.e. every component influences and is influenced by all the others. Thus the process of setting goals will influence the working methods and results, and the results will be a feedback that modifies the methods and the goals. The behaviour of a group of pupils is not only an effect of the teacher's leadership and instruction, but also a cause of his working methods.

To look upon a school as an *open* system implies an effort to pay attention to the interaction between the system and its environment. When we consider this interaction we understand the difficulty of defining the boundaries between the system and its environment. The interaction is often of a kind that makes us feel inclined to extend the boundaries. As an example we may take the student examination which the pupils of FGO have to pass at another school in Oslo. Is this examination a part of the FGO-system? - The Oslo school board may serve as another example: As a managerial body which makes decisions of vital importance to FGO it is in this respect as much a part of the FGO-system as a part of this system's environment.

By the application of a system's approach a complicated interaction between systems and subsystems emerges on a number of levels from the society as a whole via a particular school organization and to the individual member of this school. We may find that the description of a school will thus become very complicated, but we hold that the description must be so in order to correspond to the matter we try to describe. A description is a kind of model or analogy of the thing described. If the model is significantly less complicated than the thing itself we get an insufficient understanding of it.

In the course of description we must choose levels in the series of systems and subsystems, i.e. we sometimes focus upon the school as a whole with e.g. its administration as a subsystem, and sometimes we concentrate upon social interaction where e.g. teacher behaviour and student behaviour will be subsystems.

The concept of open systems has a set of relatively well-defined characteristics (see e.g. Katz and Kahn, 1966) which may serve as a framework. Onto this framework we "map" conceptual material from what we conceive as a highly structural school and a school that might be in line with the idea of life-long education. The result of this procedure is the models A and B, Fig.1 (see p.38). The models thus become representations

of two types of schools (see e.g. Hawes, 1975).

Our principal interest is focussed on Model B, as this model may help us find answers to our two main questions:

1. What characterizes a school that is in line with the idea of lifelong education?
2. To what extent does FGO correspond to such a school?

In our description of FGO we need model A as a contrast, because FGO was established in reaction against main traits in that model. As a matter of fact, the founders of FGO tended to define their school negatively, as a counter-image of a model-A-like school.

The purpose of this model building is two-fold:

1. to produce questions and/or hypotheses that may be tested against information about FGO;
2. to explicate more fully the concept of life-long education within a school setting.

The nature of this investigation does not invite the formulation of hypotheses in the strict sense of the word. Instead, the general idea of lifelong education will be the basis for our major research questions.

A special device used in the observations of social relations and processes is represented in Fig.2 (see p.46). The matrix is constructed on the basis of the following assumptions:

1. There are significant connections between basic attitudes towards self and others.
2. There are significant connections between such attitudes and general style of social behaviour.
3. The relationships between persons may be divided into two broad categories, viz. complementary and symmetrical relationships.

The matrix helps us organize our observations of social interaction.

CHAPTER 5

DESCRIPTION AND ANALYSIS OF FGO

5.1 The Process of Setting Goals

The organization of FGO is established in order to achieve certain ends or goals. These goals were not set once and for all at the time when the school was founded. In this connection it is better to look upon goalsetting as a process which goes on all along as fresh individuals join the organization for a shorter or longer period. Each year a fresh group of pupils becomes members of the organization, and from time to time teachers come to take over whenever there is a vacancy.

So we look upon the organization FGO as a social unit where people establish more or less stable relationships between themselves in order to make it easier to achieve certain goals. Even so, these goals show a relatively constant nature over the years, i.e. the goals pursued by the first pupils and teachers of FGO were generally the same as the goals that pupils and teachers of FGO try to achieve at present.

According to the regulations of the FGO the organization has three goals:

1. to make a contribution to the reform of the traditional school by way of experimental practice;
2. to be an alternative to the traditional school;
3. to create the conditions for personal growth and development on the part of the pupils in the widest possible sense. To achieve this goal the school will practise school democracy.

Pupils and teachers who regard the traditional school as being authoritarian or antidemocratic will, in joining FGO

alone, be able to demonstrate the rejection of authoritarianism in schools. If we regard the goals of the individual members more closely, we find some variation to the effect that while some members attain their main goal in the protest against the traditional school, others regard the promotion of personal growth on the part of the pupils as the goal that overshadows all others.

A natural consequence of this diversity of goals is that the different members of the FGO will show varying degrees of engagement in the school activities, a fact that was clearly demonstrated during our observations in the school. Some members use very much time and energy in an effort to make the school succeed; others, however, do not seem to care much and may appear content with just being passive members of the organization.

The fact that FGO is an alternative to traditional school, means that the pupils all aim at passing the student examination which is required for entrance to the universities. There may be a greater or lesser degree of overlapping between this goal and that of broad personal development, according to the definition of persoral development made by the different members. Most pupils and teachers, however, agree that the learning and development required to pass the examination is not at all as broad as the personal development which FGO tries to achieve.

If we again look at the goals of the individual pupils, we see that the primary goal of some of them is to prepare for the examination. They prefer taking this preparation at FGO because they find the methods and the atmosphere there more agreeable than at the traditional school.

Accordingly, the goalsetting that functions in practice will be compromises between more or less overlapping interests or goals, realized within the boundaries set by FGO's resources and the environmental systems. As members of the organization change from time to time, the degree of consonance in goalsetting will vary, and consequently, the organization's ability to set operational subgoals and make decisions varies too. In the practices of FGO we can from time to time see varying degrees of coordination of activities, and varying ability to develop and conduct projects and enterprises in the pursuit of goals.

On the whole, however, the effective goals lead to prac-

tices of a relatively stable nature which differ markedly from those of a typically traditional school: The practices of FGO are characterized by anti-authoritarian attitudes, and by the fact that the responsibility for their own learning and even for the management of the organization is largely left to the pupils. Another trait which is obvious to an observer is a great degree of tolerance and acceptance of individual variations in interests, opinions and behaviour.

These characteristics seem to be in line with the idea of lifelong learning. The individual pupil must, just as in real life outside school, set goals for his own learning and development and take part in the organization and management of the activities leading to the goals. Being one's own leader in the learning process, whether in private study or autonomous groups, can best be learnt in this way. In a traditional school we find that mainly two different roles are played which consequently may be learnt by the pupils, namely the role of leading others and the role of being led. The latter role is learnt by the pupil through practice, the former may be learnt by imitation of the leaders. The role of being one's own leader is manifested only to a slight extent in such a system, and the system gives the individual very little help in acquiring the role of self-direction. (The leaders are themselves led by other leaders, who are standing higher in the hierarchy.) We must add here that leaving responsibility to the pupils alone is not a sufficient means of teaching them how to be their own leaders, but it is probably one of the prerequisites.

The preparation of the pupils for the examination is a goal that differs from the others with respect to self-direction in the learning process. Even though there are optional methods of work, the subjects and the levels of competence required are determined by systems on which FGO has no direct influence. This implies that FGO is not free in its preference for values underlying its planning and decision-making, but has to make allowance for some important decisions taken beforehand by systems outside the organization. As these decisions concern such central elements as the priority of knowledge and skills and the standards used in the evaluation, we must conclude that FGO's opportunities to pursue its special goals are considerably limited.

In the perspective of lifelong education this fact becomes interesting in a fundamental sense. A school which is run in line with the idea of lifelong education must run practices

adapted to the conditions of the real-life society in which the school exists. This does not mean that one should regard the present conditions in the society as unchangeable, but it implies adjusting oneself to a realistic expectation of what will be the conditions of life for individuals and groups in future. It seems unquestionable that a great deal of what the individual must learn in the course of his life must be determined by others than the individual himself. In like manner as FGO demands that the teachers have certain qualifications, any organization must determine the job requirements in connection with the employment of workers.

The members of a society need to have a relatively wide informational community for their feeling of identity and their ability to maintain and develop the society. This implies that the society must, by its authority, define certain measures of learning on the different levels of the school system. The problem of how much and what kind of knowledge should be predetermined in this way is an important one, but will not be discussed further in this connection.

It seems evident that if FGO had been independent of the student examination, the organization would still to a great extent have had to find criteria for its goalsetting and evaluation outside itself. A main characteristic of organizations that function as open systems is just that they must transcend their own boundaries in goalsetting and evaluation. (Finding all the standards within the organization would mean to function as a closed system, which also means a limited time of existence.)

So individuals and groups in real life to a great extent have to choose goals and evaluate their performance according to what is required and expected by the greater community in which the individuals exist. The goals of learning in the individual's continued learning process through life probably have to be compromises between the individual's own values and preferences and the values and preferences which are representative in the greater community.

5.2 The Formal Structure of FGO

The structure of an organization consists in the practices of the organization that are relatively stable and which allow us to identify or recognize it from time to time. We may say that the practices are structured, i.e. the activities that may

take place are variable within certain limits. If these limits are wide, we say that the organization has a low degree of structuring, and if they are narrow, the organization has a high degree of structuring.

In an organization with a high degree of structuring the individual person has clearly defined tasks and duties, which are distinguishable from those of the other members. There are small margins for private evaluation and judgement; regulations prescribe who shall do what and when. There is mostly a hierarchical structure of authority, which also marks the control and communication patterns. A belief to the effect that the best knowledge and understanding of problems is to be found at the uppermost level of the organization reinforces the hierarchical structure.

In an organization with a low degree of structuring the division of work is variable according to actual competence. Responsibility is not attached to the fulfilment of particular paragraphs in the regulations, but is more extensive, bearing upon the practices of the organization. The structure invites the members to see that competence may be found on any level, and authority does not so easily form a hierarchical pattern. This fact has an impact upon the pattern of control and communication which tends to form a network of direct contacts. Sanctions may be exercised mutually because the members of the organization are relatively equivalent members of a community of interests.

A low degree of structuring can also allow the members of the organization to become competitive in their interaction. Thus they may try to prevail or outdo one another in an effort to acquire power and influence in the organization. Whether this will happen, depends on the degree of consonance in questions of goalsetting, and to what extent the members attach more importance to the private goals than the common ones. If disagreement on goalsetting grows too strong or if private goals and matters of prestige become dominating, an organization with a low degree of structuring is vulnerable and unable to realize the values it strives to attain through its practices.

The organization FGO must be characterized as having a low degree of structuring, as relatively few decisions are made in terms of regulations and instructions. This fact implies that problems and tasks must be tackled successively as they emerge without much help from prescribed routines. Neither

solutions nor problem-solving procedures are fixed in advance to the same extent as is the case in a traditional school. The structure just grants all the members equal rights in the decision-making processes. The individual member's real engagement in the processes depends on how he perceives the connections between the case in question and the goals he values most. The participation in discussions and decision-making processes is therefore somewhat variable. Some matters attract the interest of most pupils and teachers, but others are decided upon by only a few members who out of interest or a feeling of responsibility deem it important to solve the problem or settle the matter.

The low degree of structuring in FGO has implications which are significant in relation to the idea of lifelong education. The real life of the individual outside school is not structured in a manner that gives prescribed solutions to the tasks and problems he meets with. It is characteristic of real life that individuals and groups themselves must identify tasks and define problems, develop strategies for their solution, organize and carry out the practical parts of them. Under such conditions it is of great importance that the persons should be flexible enough to draw upon competence and expertise where such is to be found, without being limited or hampered by formal regulations that decide what can be done by whom. It is important to note that by applying this pattern in a school, the pupils will acquire much knowledge and experience about preconditions and procedures which make the foundation of the actual teaching and learning in school. The pupil at a school with a high degree of structuring will generally get to know just a small part of what goes on in the organization, namely what happens during the lessons. He will be more or less ignorant of what it takes to run the school and where the resources come from.

Even so we may find it worthwhile to consider the following problem: Is the low degree of structuring advantageous for the fulfilment of all the tasks within the goals of FGO? Regarding projects and activities where FGO may proceed on the basis of its own premises, it seems clear that a low degree of structuring is preferable and even necessary. In contrast, activities which aim at preparing the pupils for the examination may benefit from a higher degree of structuring. It is not always possible to distinguish between two such categories of activities, since the activities which are definitely relevant for the examination are often integrated in interdisciplinary projects with a much wider scope than would be required in an examination setting.

A considerable proportion of the knowledge and skills, however, whether relevant for the examination only or necessary in wider projects, is still acquired most rationally by applying strategies and methods which are already developed in traditional training and instruction. Accordingly, some activities might preferably be conducted in line with well-known pedagogical methods in a structure that clearly defines the roles in the process.

Quite a lot of highly structured programmes of analogous character are to be found in real life. Both in work and leisure time the individual often finds himself in a situation where a standard course or training programme may be of great value, and where it would be most irrational and unwise to start "from scratch", discussing objectives, activities and ways of conducting the course. Within most of the subjects comprised by the examination there are significant proportions of knowledge which may be regarded as relatively neutral information of which a pupil should first try to get a satisfactory command. Highly structured methods and techniques may then be most suitable to the purpose.

Provided that the members have a free choice of degree of structuring, such programmes would not violate the anti-authoritarian policy of FGO.

5.3 The Internal Milieu of FGO

When we look more closely at the internal milieu of an organization, it is appropriate to define some subsystems and study the interaction between them. Then we may go further and study the processes going on within them. Within a school we may tentatively define three subsystems which are crucial in the understanding of the organization, namely the managerial, the social and the pedagogical subsystems.

The managerial subsystem is concerned with the planning, organizing, staffing, admission of students, control, etc. *The social subsystem* bears on the relationships between persons in the organization as demonstrated through attitudes, roles, status and norms. *The pedagogical subsystem* is the methods and means which are known and mastered in the process of instruction and learning in the school.

There is no hierarchical order between these subsystems,

nor are they juxtaposed. So they can function independently of each other. The subsystems are integrated like aspects of a process forming a whole. They are mutually dependent and have reciprocal impact upon one another. Changes in one subsystem lead automatically to changes in the others. But it is not so that improvements relative to an objective in one subsystem automatically lead to improvements in the others in relation to the same objective. This fact has strong implications for an innovative school like FGO. If we want to democratize the practices of a school by changing the hierarchical managerial subsystem, we may e.g. invite all the pupils and teachers to join in decision-making processes concerning planning, organizing, etc. of activities. This innovation would undoubtedly induce changes in the social relations between the persons. The changes in the social subsystem, however, are not easily predictable. Under certain conditions the changes might lead to frustrating results with damaging retroaction to the reform of the managerial subsystem.

We may say that successful reforms in one of the subsystems presupposes corresponding changes in the others. The pattern of social attitudes, status and roles must be changed in the direction of equality between individuals if the reform in the managerial subsystem shall be carried out successfully. Accordingly, changes in the managerial and social subsystem presuppose changes in the pedagogical subsystem. Without a certain measure of innovation in the pedagogical subsystem, impacts will certainly follow, but probably of a kind that will reduce the efficiency of teaching and learning. An effect of that kind may have very unfortunate consequences for a school, as the most central processes of the organization are the ones which suffer.

Keeping to the example above, we may say that the reforms in the direction of more equality and democratic functioning imply corresponding pedagogical reforms that provide for democratization and a level of knowledge and skills in harmony with the goals of the school.

This is probably the most difficult problem an innovative school like FGO has to face. The experience, so far, seems to indicate that the greatest challenge has been met in this field, both internally and in relation to external systems. Attacks, criticism and scepticism from outside have mainly been directed against the quality and efficiency of instruction and learning. Much of this criticism may certainly be repudiated, as the

critics to a great extent have operated with a concept of learning and instruction which is rather narrow in connection with the goals of FGO. Many critics have on a similar basis even questioned the justification of FGO's existence. The best proof of their being too categorical in their judgment is the fact that the school still exists and that fresh members join every year.

To illustrate how we conceive of the internal correspondence between the subsystems, we shall employ models of two systems with different degrees of structuring, system A and system B.

Subsystems	A: High degree of structuring	B: Low degree of structuring
Managerial	Many decisions prearranged. Hierarchical responsibility. Stable division of work. Vertical pattern of control and communication. Power-based authority.	Few decisions prearranged. Total responsibility in relation to goals and practices. Variable division of work. Network of control and communication. Competence-based authority.
Social	Division of status and roles marked by formal structure. Complementary relationships. Social distance, excluding attitudes. Defensive communication.	Informal division of status and roles. Symmetrical relationships between persons of different formal status. Social closeness, including attitudes. Open communication.
Pedagogical	Practice according to prescribed methods. Handicraft. Low awareness of process. Receptive learning-reproduction. Encyclopedic knowledge. External motivation.	Practice based on insight and a "diagnosis" of need. Profession. High awareness of process. Self-evaluation. Creative methods. Interdisciplinary projects. Learning for transfer. Internal motivation.

Fig.1: Models A and B

The models A and B are not descriptions of traditional school and FGO respectively. They are theoretical models and as such they may be amenable to observation and analysis of schools. There is, however, no disagreement about a traditional

school being more like model A than FGO is, and FGO being more akin to model B than a traditional school is. To put it differently, we may say that the establishment of FGO is an attempt at taking a step from an A-related to a B-related type of school. Finally the B-model seems to be more in line with the idea of lifelong education than the A-model is.

The number and kinds of subsystems may be varied according to the purpose of the study. For this study we have decided to distinguish between three subsystems, and hope that this will be suitable for our purpose.

5.4 The Managerial Subsystem of FGO

The managerial subsystem of FGO seems to correspond well to model B. The regulations of the school do, in a very general manner, state the purposes and goals of the school, and give a very brief prescription of the division of tasks and responsibilities within the organization. The General Assembly is the highest managerial authority and the School Council has the executive power. Apart from the school leader who takes his authority from the General Assembly, there are no formal positions with authority attached to them. Consequently we have an organization with a very low degree of structuring. Very few decisions may be made beforehand, a great many of the tasks to be accomplished must be taken through all the stages of problem solving.

The individual members are formally guaranteed the right of influence on any important decision. Thus the formal structure counteracts a hierarchical division of tasks and authority where the responsibility of individuals and groups is restricted to particular levels and departments in the organization.

For practical purposes, however, a division of work must be made. This is done in a flexible way, so in principle any member or group of members may be chosen to carry out any kind of work. (An exception to this principle is the role of being a school leader. The school leader may be chosen from among the teachers only.) Assuming good cooperation and coordination of efforts, the competence existing in the organization can be utilized without regard to the formal status of the members.

The opportunity of accumulating experience and routine on the part of particular members is very small, compared to an

organization with a high degree of structuring. This fact, together with relatively time consuming managerial procedures, may account for a low degree of efficiency. There seems to be a commonly felt need among the members of FGO for more efficient management. There is therefore a problem where one has to balance the need of managerial efficiency against the wish of realizing equal rights and flexible utilization of competence.

A successful compromise which takes both sides into consideration may be to distinguish clearly between matters in which it is important for the individual to have a say, and matters that preferably may be delegated to certain posts or permanent committees. Provided that the General Assembly controls the delegation of authority, FGO might in this way achieve more efficiency without losing the advantages of a low degree of structuring.

The low degree of structuring leaves the subsystem open to strong influences from the informal structure that will develop in any kind of organization. When members interact, some of them will gradually turn out to be more competent than others, be more skilful advocates for their views and opinions, have more persuasiveness, etc. These members will get informal leader functions which give them more influence in the organization than others have. When there is no formal structure counteracting such a development, the organization has no means to regulate this phenomenon. FGO is partly for this reason more marked by the personality of particular members than is the case in a traditional school. Even so, the school shows many characteristics which are relatively constant, a fact that may be explained by referring to the degree of consonance in goal-setting and to the interaction with stable systems of the environment.

An example of this is given by a group of 10-12 female pupils who made systematic observations of the impact of sex roles on the discussions in the General Assembly. This group found a pattern of sex roles corresponding to the traditional pattern in the society outside FGO. Generally, pupils from higher grade levels spoke more than those from lower grade levels, but apart from this fact, it was invariably the male pupils and teachers who "took the floor" most of the time.

A total feeling of responsibility on the part of the members is indicated by the fact that we can hardly detect any tendency towards departmentalization in discussions and decision-

making. In the school committee of a traditional school you will often find that the different members act as advocates of particular departments. The head is often alone in arguing for the organization as a whole. It is not unusual to find rivalry between the science teachers and the language specialists, and quite commonly the pupil representatives will defend narrow pupil interests only. It is different in FGO. The discussions in the School Council are marked by the community of goals, and decisions are made by consensus.

Authority is attached to real competence, i.e. no one can exercise authority by virtue of his position or his academic background. There is only one kind of formal sanction mentioned in the regulations: The School Council may decide that a member who does not fit in well in work or social intercourse, cannot lay claim to membership for the next term. This sanction may be passed if the member shows no signs of improving after having had his case discussed. It is characteristic that any member can address any co-member commenting or criticizing his work or behaviour. The pattern of control forms a so-called network.

A conscious determination to exempt the teachers from acting as disciplinarians is shown in the following anecdote: A small group of pupils of FGO developed the habit of invading the common room in the afternoon to drink beer. Many teachers and fellow pupils found this behaviour intolerable. The General Assembly then decided that this beer-drinking should stop, and that fellow pupils should take action. When the beer-drinkers in the afternoon started their "party" again, a group of fellow pupils marched into the room, reminded them of the decision made by the General Assembly and poured the beer into the sink. This measure effectively put an end to the beer-drinking habit in the common room.

It goes without saying that there are exceptions to the rule. In FGO we have observed that pupils in certain respects leave responsibility to the teachers, e.g. in the control of their learning activities. It looks as though the teachers are expected to have the control of how far the pupils get according to a plan, and pupils accept a moderate form of "whipping" to secure that work is done in time. If a teacher is absent for part of a period, it sometimes happens that pupils idle time away while waiting for the teacher to come and initiate activity. The two last examples however, make a contrast to the general pattern at the school, and have probably connections with conditions that will be discussed under the heading of the pedagogical subsystem.

5.5 The Social Subsystem of FGO

The social subsystem of FGO is marked by the fact that formal status is practically equal for all the members of the organization. To describe more in detail what this means, we shall apply an approach to social interaction which is developed within the study of human communication (Watzlawick et al., 1967). We then try to observe the communicative behaviour of the persons to get an understanding of the relationships between them and the processes that create and maintain these relationships. By the term "communicative behaviour" we understand what the persons express verbally as well as all behaviour that accompanies or supplements verbal expressions and has the function of conveying meaning from one person to the other. The mode in which something is said, e.g. with what kind of miming, gesture, tone, etc. is used, and the context of the communication as a rule tell more about the relationship between the communicants than the bare verbal expression.

We may distinguish between two broad categories of relationship between persons. These are called complementary and symmetrical realtionships. We call the relationship complementary when the persons in the social interaction behave in such a manner that they create and maintain differences between themselves as to status, leadership, rights, norms, etc. A typical example would be the relationship between a leader and a person who is led. They are both dependent upon one another, as each role presupposes the other. If we consider all the signals in the communication that tell us about the relationship, we will note that people send different signals to each other. The one in the "higher" position may give advice, criticize, or comment on the work or behaviour of the other. So he invites more or less strongly to a definition of a complementary relationship with himself in the leading or primary position. If the other person is receptive and regulates his behaviour accordingly, this is a signal that he accepts the definition of the relationship with himself in the dependant or secondary position. Through the transaction of signals, that may be expressed verbally, but most often non-verbally, the persons "negotiate" till they reach an agreement about their relationship in the present situation. In other situations, where e.g. formal or real competence of the persons is different, they may change positions within the complementary relationship.

The relationship is called symmetrical when the persons can exchange the same kinds of messages, verbally and non-verbally.

This pattern of exchange implies that the persons are on a par with one another. They can e.g. inform and evaluate one another, initiate activity, etc. The equivalence is demonstrated by the fact that the persons accept the alternation of initiative, criticism, etc. Symmetrical relationships may be marked by co-operation or competition dependent on the persons having corresponding or incompatible goals in the situation.

One type of relationship may be preferred to the other only after a consideration of the purpose of the interaction and an estimation of each person's competence in relation to goals. Accordingly, there are many situations in school where it is appropriate to establish complementary relationships with a teacher in primary position and pupils in secondary position. In many instances, however, it is equally advantageous to constitute symmetrical relationships with mutual information, evaluation, initiation, etc.

Of great importance, therefore, is the ability of the communicants to alternate between complimentary and symmetrical relationships, between leading and being led, dependent on the situation and the competence of the persons involved. A rigid maintenance of one type of relationship will hamper a profitable social interaction and restrain the technical and personal development.

In the perspective of lifelong education it seems evident that the members of a school-society must have ample opportunity to function in the positions of both complementary relationship and symmetrical relationship. A pupil functioning in a secondary position all the time, will need someone who can lead him, i.e. his learning stops when there is no one to teach him. A pupil who cannot adapt to the role of being led by a teacher, will fail to profit from effective instruction both at school and in later life.

In our model B the prevalence of symmetrical relationships is great compared to what we find in model A. FGO corresponds very well to model B in this respect. Communicative and general behaviour, as well as the arrangement of rooms and furniture, express the symmetrical relationships. In traditional school the complementary relationships, especially between teachers and pupils, are rather stable. In FGO we find a corresponding stability in symmetrical relationships.

When people communicate, they integrate voice, miming and

verbal expressions in complicated patterns to form what we may call a communication style. This term is intended to refer to a whole range of things, such as whether the person is assertive, questioning, pedantic, or humorous; whether his tone or voice is loud, soft, etc.; whether he accompanies his words with gestures, and so on. The style of a person in a particular situation tells something about how the person regards himself, the others, and the relationship between himself and the others.

The different styles a person may use in different situations are more or less easily identified, and some of them have obvious impacts on the social interaction. The interaction is to a great extent determined by the view these people have of themselves, of the others, and of the relationships between themselves and others. We shall try to characterize behaviour that tells something about these interactional aspects, and later discuss how some combinations of them may influence the teacher-student relationship.

View of, or attitude to oneself

A person expresses this attitude in different ways which allow us to characterize it along a scale between the extremes *poised - socially anxious*. A person who is poised in social situations shows self-acceptance, has confidence in himself, feels well, is relaxed, can control the situation in a smooth manner, and is free from self-consciousness. A person who is socially anxious has the opposite characteristics.

View of, or attitudes to others

This dimension is a scale between *acceptance* and *rejection*. An accepting attitude shows itself in all behaviour towards others that in some way or other is rewarding. Acceptance then means to show interest in others, listen to what they say, show friendliness, concern, respect, and appreciation. Acceptance as it is described here is also often called *including* behaviour or attitude. Rejection, or excluding attitude, is shown when behaviour towards others is marked by negative responses, such as disapproving noises, gestures, or verbal expressions as reactions to other people's behaviour.

Attitudes to oneself and others within complementary and symmetrical relationships

In common social interaction we find complementary and symmetrical relationships together with the dimensions poise-social anxiety, and acceptance-rejection, in different combinations. In everyday life we deal with our fellow men in such

diversified situations that almost any combination might occur. In special social relationships however, e.g. the pupil-teacher relationship, the goals of the activities and the differences of competence will limit the number of combinations.

Fig. 2 may help to systematize combinations relevant for the pupil-teacher relationship.

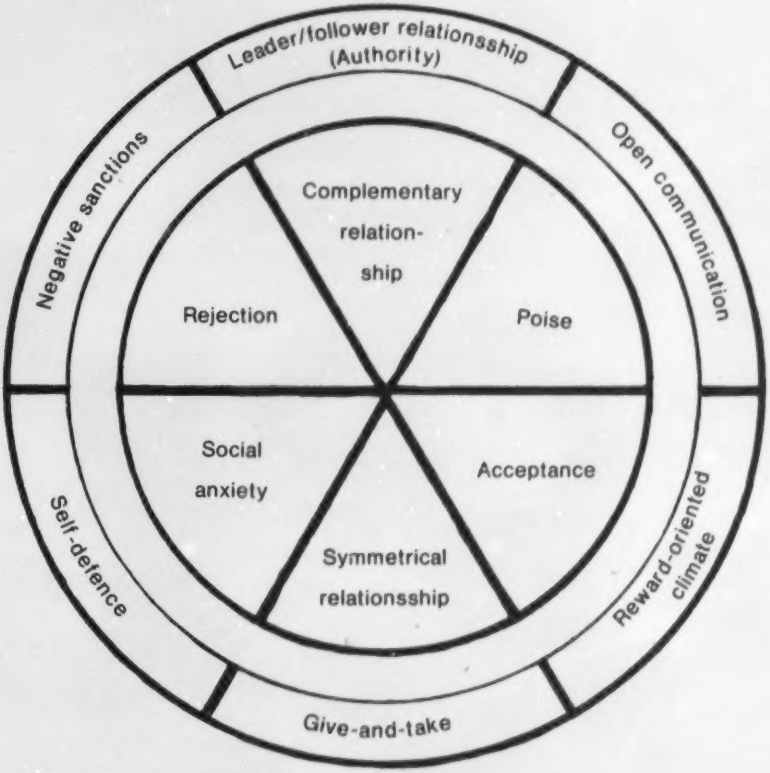


Fig.2: Complementary and symmetrical relationships

Any half circle in the figure makes a possible combination of relationship and attitudes. The words in the outward ring indicate behaviour associated with attitudes and relationships arranged in the respective sectors within.

We shall look more closely at three of the combinations, viz. complementary relationship combined with rejection and social anxiety, complimentary relation combined with poise and acceptance, and symmetrical relationship combined with poise and acceptance.

Complementary relationship, rejection and social anxiety

This combination gives a behaviour pattern and an atmosphere in school that few people would like, but which it is not impossible to understand. If the teacher has little confidence in the pupils' capabilities, he may easily come to think that they must be firmly directed and controlled. He may reject their questions and objections concerning the subject matter and his instruction, and defend his own methods and rationalize his attitudes. The situation may grow strained for the pupils too, and they will get less tolerant to sanctions of all kinds, and to negative evaluation of their performance and qualities. They will tend to defend themselves by hiding their own uncertainty and ignorance, which again leads to less realism in the evaluation of their own competence. The rejection between teacher and pupil may become mutual, and the social anxiety will increase, especially on the part of the teacher. Ordinarily, people would part if they had developed such a relationship and were free to leave the scene. In school however, that possibility is unlikely to occur, because the pupils are dependent on schools and teachers for their education.

Any leadership presupposes authority in the leader. The authority which is combined with rejection and social anxiety must have power or santions as a basis, and is therefore authoritarian. Removal of the teacher's power would change the relationship into a symmetrical one, but if nothing else were changed, it would be competitive in a destructive way.

Complementary relationship, poise and acceptance

This combination differs from the one described above in many respects. The acceptance will be demonstrated by signals that express confidence in the motivation and the capabilities of the pupils, and acknowledgement of their efforts. The acceptance also includes the feelings of the group and the right to express opinions that differ from those of the teacher. This is of vital importance for the feedback from pupils that the teacher needs in his work. Acceptance from the teacher will strengthen the self-confidence of the pupils, and may give them a basis for self-evaluation that permits them to look realistically at their own abilities and shortcomings.

The teacher's own poise will influence the social interaction. Instead of applying different strategies of defence to hide or reduce his own anxiety, he will make open evaluations of his methods and interaction with the pupils. Self-defence has a preserving effect, because weak points in one's own performance are hidden. Sound development presupposes open self-evaluation.

Symmetrical relationship, poise and acceptance

This combination is a typically "supportive climate". The participants are able to use their own and each other's resources in a cooperative activity.

To see in more detail what leadership means in this connection, we shall break down the concept of the leader's role into five broad categories of leadership functions, as suggested by Gibb and Gibb (1955):

1. *Initiating*: keeping the group action moving, or getting it going (e.g. suggesting action to be taken, pointing out goal, proposing procedure, clarifying).
2. *Regulating*: influencing the direction and tempo of the group's work (e.g. summarizing, pointing out time limits, restating goal).
3. *Informing*: bringing information or opinion to group.
4. *Supporting*: creating emotional climate which holds group together, makes it easy for members to contribute to work on the task (e.g. harmonizing, relieving tension, voicing group feeling, encouraging).
5. *Evaluating*: helping group to evaluate its decisions, goals, or procedures (e.g. testing for consensus, noting group progress).

All these five types of function have to be provided if the group is to survive and get the job done. Initiating functions are most strongly called for at the beginning of a group's work, regulating and informing become more important as work goes on and solutions are proposed. Supporting and evaluating functions are needed all the way along, but especially as the group moves toward the final product of its work.

In a complementary relationship the leadership functions

would be handled almost completely by a formal leader. One of the main characteristics of a symmetrical relationship would be that the functions may be supplied by the leader or *any one of the group members*. The work of the group will be effective to the extent that needed group functions are supplied by members at the time they are needed.

Miles (1970) points out that this functional view of leadership tends to the belief that leadership is learnable and that group behaviour may be improved by training. When leadership is shared by group members, then the group members should be trained to develop their skills in diagnosing group process problems as a basis for supplying needed leadership functions.

Teacher-pupil relationships in FGO

We can easily see that the combinations of complementary relationship with poise and acceptance, and symmetrical relationship with the same attitudes will be most expedient in the realization of FGO's goals. We have found FGO to correspond quite well to the description of the above mentioned combinations, symmetrical relationships being prevalent.

Symmetrical relationships are appropriate for lifelong education too, as they may strengthen the autonomy of the learners. What the pupils learn in school is knowledge, insight, skills, etc. which they should be able to utilize independently and with good power of judgement in different contexts. It is therefore important that the pupil develops autonomy in relation to his knowledge, i.e. he must have full mastery of his knowledge and be able to develop his competence after he has finished school.

On the other hand, an indiscriminate practice of symmetrical relationship would probably not leave room for optimal utilization of teacher competence and student learning capacity. A strategy that would be in line with the idea of lifelong education as well as the goals of FGO, might give relatively more room for complementary relationships from the first school-days of the pupils, and gradual increments of symmetry along with increasing competence and maturity on the part of the pupils.

5.6 The Pedagogical Subsystem of FGO

In a school it is only natural that the pedagogical subsystem is paramount in the realization of the goals of the

organization. The pedagogics of a school is analogous to the technology of a business organization that produces articles of some kind. Technology means ways and means used in the process of refining the raw materials. In school this corresponds to ways and means used in the processes of learning and instruction.

In a school with a high degree of structuring, goals, curriculum, and specific knowledge requirements are to a large extent predetermined. Pedagogics will then be reduced to matters of methods that may be learnt once and for all like a handicraft, and to technics of learning. So far, this has been the case in traditional schools in Norway, and probably in most countries. The teacher training colleges, where also the teachers of FGO come from, prepare the prospective teachers mainly for traditional instruction.

An innovative school like FGO must solve its pedagogical problems in a wider perspective than traditional schools. Many traditional instructional methods may, of course, be used by FGO, especially in the preparation of the pupils for the examination. Respecting the goalsetting of FGO as a whole, it is evident that the school needs a pedagogics more suitable to the purpose. To a certain extent FGO may draw on pedagogics developed by reform movements and other innovative schools, but this is still not sufficient. It seems necessary to redefine the roles of the teachers and the pupils in relation to methods, viz. to raise their level of pedagogical competence from that of a craftsman to that of a professional.

A fundamental point of the policy of FGO is that it should be an alternative to the traditional school. This implies, among other things, being independent of traditional methods and practices. Discarding methods of the traditional school indiscriminately will not mean independence, but rather another dependence with a negative sign. Independence can be achieved only on a basis of pedagogical knowledge sufficient for making a selection of methods compatible with the objectives.

This selection can hardly be done as a piece of paper-and-pencil work. Making experiments and evaluating the procedures and the results seem to be a necessary part of the work. This is a real professional job. It goes without saying that putting methods to the test requires more insight than acquiring them during periods of practice. Even more insight is needed when new ways and means are to be developed. The pioneer role of FGO includes, though in a moderate sense, the development of

new methods. To be in harmony with the ideas and practices of FGO, the evaluation of methods must be done by the teachers and pupils in cooperation. This fact calls for a considerable measure of pedagogical competence on the part of the pupils too.

We are hardly surprised then, to find that the greatest and most difficult task of FGO is the development of its pedagogical subsystem. Some of the members of FGO have taken this task seriously, and are making efforts for the advancement of better practices. The school gives its pupils more information of a pedagogical nature than do the traditional schools. It seems though, that more pervasive and purposeful efforts are needed to realize the idealistic goals of the school.

There seems to be a conflict between the pupils' need of individual freedom and the need for organization and leadership during the lessons. The great tolerance of differences in interests and behaviour seems to prevent the development of suitable practices and norms that may ensure an effective working and learning process. This difficulty is felt when pupils are late for or absent from classes or groups, which happens quite frequently. The work suffers from this lack of punctuality, and a number of pupils have expressed their dissatisfaction with these conditions. Some members might welcome the introduction of compulsory attendance and punctuality, but the reference group hold that a great majority would reject a suggestion to that effect. Many members seem to be at a loss what to do about this problem. Some kind of self-imposed discipline seems to be called for.

Closely related to this problem is the fact that many pupils who are expected to participate in the work of a class or group do not prepare the tasks required for effective participation. The pupils interviewed hold that those who want to do much school work often prefer to work individually, because the work in classes or groups is too time-consuming and ineffective. One particular class has excluded members who do not work satisfactorily. Such a measure may solve the problem for many members, and put a pressure on others to keep up a certain standard.

Another measure which involves all the members was decided upon by the General Assembly recently. This decision lays down the rule that all pupils have to sign a written agreement with their teacher binding themselves either to join the ordinary instruction periods or to work on their own with the teacher as their tutor. The decision was not unanimous, however, and a

considerable proportion of the pupils only grudgingly submit to the signing of the agreement.

When we observe the activities during a lesson, we may also notice that the work is led by very liberal regulations. Consequently the attention of the members is easily distracted from the relevant issues. Outspoken pupils may express their thoughts and associations so freely that the class is distracted from the objective of the lesson. There should of course be periods of free association and discussion; the problem is to find out and agree upon when the activities should have a high and when they should have a low degree of structuring.

The following problem was met by the Norwegian teachers: The four of them had planned to submit a couple of novels for study and later examination in their respective classes. When they presented their suggestion to the classes, however, none of them got unanimous consent from the pupils. The pupils wanted to have a free choice, some of them forming groups reading the same book, others preferring individual choices quite independently. The pupils did not seem to consider the implications of a free choice of literature. The fact that the teachers and the examination inspectors would have an almost insurmountable work if all the pupils chose different novels was given only small emphasis, and the need of an informational community as a basis for their work in classes was not understood nor was importance attached to it.

An anecdote which dates back to the early days of FGO may show how a low degree of structuring and a non-authoritarian relationship may facilitate student initiative and creativity (Israel, 1968): The lesson, which really was a seminar or group study on drama, had been arranged at the request of the participating pupils. It was led by a teacher who had some competence in the subject. One of the participants had written a scene with detailed suggestions as to how light and sound effects should be utilized. As the lesson drew towards an end, the teacher, summing up its main ideas, suggested that the pupil rewrite and extend the scene. He also asked him to consider the question of meaning and purpose of the scene. This was not appreciated by the pupils. One of them asked if this piece of advice was any good at all; he found it quite reasonable to write scenes without immediately making the purpose clear. After a moment of consideration, the teacher admitted that his recommendation probably was unwise. Then a discussion started on theatre as a means of emotional expression, social realism, etc.

We have here a demonstration of social interaction between teacher and pupils that in terms of our matrix must be characterized by the attitudinal dimensions *poise* and *acceptance* within a *symmetrical* relationship and a low degree of structuring. When a pupil openly disagrees with a teacher, there are two broad categories of possible reactions from the teacher, viz. to reject the pupil's remark as an impertinence or, like the above mentioned example, to accept it as an opinion to be taken seriously. The first reaction is typical if the teacher sees the remark as a threat against his authority as such, the second reaction is likely to occur if the teacher understands that his competence on the particular topic is questioned, while his authority, i.e. his right to lead, is accepted whenever his leadership is thought to be sound.

This brings us back to the description of *Symmetrical relationship, poise and acceptance* (p.48), where it was stated that the functions of initiating, regulating, informing, supporting and evaluating are supplied by any one of the participants when they are needed, so as to serve the purpose of the activity optimally. The above mentioned functions have to be provided if the group shall be able to proceed purposefully, but it does not matter much whether they are supplied by the formal leader or by one or the other of the participants.

A group that is able to utilize the resources represented in it, may sometimes find the best competence (or satisfactory competence) in one of the pupils. Consequently his initiating, regulating, etc. should be allowed to prevail within some part of the activity. During our observations at FGO we found that this system sometimes worked well, but most often was not altogether successful. The social relations were, practically speaking, always symmetrical, but the corresponding pattern of leadership was only occasionally effective. A higher level of pedagogical competence combined with conscious training in supplying leadership functions on the part of the pupils might change this picture.

Finally we shall quote from the report of a successful interdisciplinary project on energy, planned and carried out by the pupils in the 2nd and 3rd form of the science side:

> "The whole thing started before the summer vacation. Some member in Ravn (one of the classes) had some ideas about what the school ought to be like. We became members of 'the pedagogical group' and started to discuss these ideas. Gradually we developed an

alternative curriculum design for the whole school. We thought that the school had a very traditional program, and that keeping the different subjects isolated from each other is wrong.

According to our ideas we ought to study broad themes during periods of the year, integrating the different subjects. We thought that the traditional subjects are parts of larger wholes and that we, by studying the broad themes, could learn the subjects. We held that such an approach would create motivation for learning the subjects. To build a solar collector panel you have to learn maths, and learning trigonometry is quite another thing when you know what purpose it can be used for.

To show that the curriculum could be covered by an alternative plan, we studied the existing plans carefully and developed a schedule for the whole school that would cover the content of all the traditional subjects for all the classes. We presented this plan in 'the pedagogical group' and we met a lot of objections from the teachers. After some discussion we left the group and started to make a special plan for the 2nd and 3rd form of the science side. This plan became something quite different from the rest of the school which has grown rigid in its experiments.

We started the study of energy immediately after the summer vacation. First we planned the whole project and made agreements with the teachers (with some misunderstandings and difficulties). Then we formed groups which were to work with the different aspects of energy. At the same time we started to plan the building of the solar collector panel. To manage this work we had to learn a lot of maths and physics and some astronomy."

Comments by some of the pupils:

Bard: What I think makes this project a good one is, among other things, that we have introduced the democracy of the school into our work in the subjects. The teachers usually present the plans to us, but this time we have made the plans.

Wenche: I don't know if this method is the best

for me, but I found the work interesting.

Tone: It has been hard work, I have quite worn myself out.

Carin: It was a pleasure to work together with another class.

Berit: I think this is a fine way of doing the work. The responsibility for the program was our own. It is very important to find out what to do, without having someone to decide for you. Naturally it was exciting to learn about energy. The energy problem is very important to-day.

Concluding comment from Ina and Ylva:
What we appreciate is that we managed without a teacher. It worked better than the lessons where a teacher has arranged everything beforehand. Now we have been our own teachers, planned the project, helped each other with the problems. This has been very motivating, because we have had the responsibility for carrying through the whole project. It is quite clear that this is the right way of working: Here we have used physics, maths, astronomy, sociology, politics, history, religion and English to get a coherent picture of energy.

The evaluation of this energy project is purely informal; and so indeed is all evaluation at FGO. As the pupils have to pass the *examen artium* as private students, the teachers cannot give marks that qualify for further education. This fact probably has a positive influence on the teacher-pupil relationship: the teacher never acts as a judge of the pupil; his role is more compatible with a symmetrical relationship.

It should be added though, that a system of formal evaluation might give both the pupils and the teachers valuable feedback for the teaching-learning activities. Such a system need not interfere with the teacher-pupil relationship if the evaluation is informational only, having nothing to do with the selection of pupils for further education.

CHAPTER 6

POSTSCRIPT

6.1 About the Pupils at the FGO

In Chapter 3 (3.2) we stated that the majority of the pupils at the FGO come from the Oslo area. Most of them have an urban background, and the next point of interest to be considered may be their social background. We have some previous information about this (Hauge, 1972, p.29 and Hareide, 1973, p.3). It will be interesting to see if this distribution of social groups has changed. We have made use of the school file which contains the names of the pupils who are attending school this year. Unfortunately the category "Others" has been as high as 27,6%. There is no means of knowing exactly what that means; it can be the result of different scoring procedures or it can be that information on which this figure is based was dubious or lacking.

	Professional	Employee	Businessman	Labourer	Others	Total enrolment
1967-68	47.3	18.6	14.7	17.1	2.3	129
1970-71	46.2	26.6	12.0	6.0	8.9	158
1972-73	32.0	32.4	11.6	18.0	5.8	167
1978-79	37.7	18.4	10.2	6.1	27.6	143

Fig.3: Distribution of the pupils according to social background at the FGO
(expressed as percentage of total enrolment)

With the uncertainty stemming from the high percentage in the last category, it is more difficult to make a comparison. The most likely conclusion, however, seems to be that the distribution from year to year is quite stable. Compared to the pupils' social background at the official schools in Oslo, we find that pupils at the FGO with parents in professions are over-represented, and pupils with parents in business are definitely under-represented. Pupils with parents from the labouring classes seem to have a somewhat low representation.

We also checked the marks attained by the pupils from the FGO, at the final examination in 1978. The marks show almost the same average and the same deviation as the marks from other schools. Concerning age there is no great difference between the pupils at the FGO and those at other schools.

6.2 About the Teachers at the FGO

The total number of teachers is fifteen, of whom one works half-time only. Eight are women and seven are men teachers.

Formal qualifications

5 Cand. philol. (Graduate Certificate of Arts), 4 female, 1 male

3 Cand. real. (Graduate Certificate of Science), all male

5 Cand. mag. (Graduate Certificate, lower degree), 3 female, 2 male

1 Ph. D. (USA), 1 male

1 Art and craft education (USA), 1 female.

Age 1978

Under 30 years: 2 (1 female, 1 male)

30 : 40 years: 8 (4 female, 4 male)

40 : 50 years: 3 (all male)

50 : 60 years: 1 (male)

Over 60 years: 1 (female).

The pupil-teacher ratio is approximately 11:1 (extra lessons for 7 pupils having learning disabilities included). Average ratio for Norway is approximately 13:1.

Salary

The teachers receive salary in accordance with teaching qualifications and seniority as in the traditional schools, but get a FGO-supplement of 2000 N.Kr. per annum for evening duty and special meetings after school hours. The school leader is not paid extra for the responsibilities of the position.

6.3 Financial Situation

FGO is financed by the County of Oslo and the Norwegian State in accordance with regulations which apply to all schools for pupils at this age level. As FGO produces more educational material than do most other schools, the financial situation may be more difficult than it is at other schools of the same size.

The pupils of FGO, unlike the pupils of other schools, undertake the cleaning of the rooms without pay, to save money for educational purposes.

6.4 About the School Leavers

At the planning stage of this project we decided to carry out a follow-up study among former pupils of the FGO. Our intention was to find out whether former pupils of FGO showed any remarkable traits concerning vocational choice and social integration compared to former pupils of traditional schools.

499 letters were sent to pupils who had been members of the FGO during the period of 1967-73. The total number of pupils in that period was 515, but the addresses of 16 were unknown, and in 41 cases the letters were returned because the addresses could not be traced. The percentage of replies was, however, very low, varying from 12,5% to 54,5% for the different years. Because of the uncertain representativity of the material, we have not found it appropriate to present it in detail. Instead we will sum up briefly some of the information that may be gathered from the answers.

Out of 116 pupils 70 took the final examination (*examen artium*) at the end of their stay at the FGO. 22 pupils completed the examination later on. The remaining 21 % are about the same as the ratio of drop-outs of traditional schools.

43% have been students at universities for shorter or longer periods, which is a similar proportion to that of pupils from other schools. Quite a large number of the pupils reported that they were actively participating in some of the administrative groups or in the social milieu at the FGO (about 60 to 65%). 40.35% reported that they were passive in both the social and in the administrative group.

As to the reasons for going to the FGO, 62% mentioned either that they were bored by or in strong opposition to the traditional school. The majority of the pupils regarded the FGO as having been of personal importance to them (83%), and just 5% were negative to the same question. 19% thought that the FGO should have made more and stronger demands on pupils, and 41% held the opposite opinion. 65% were positive in their evaluation of the FGO, less than 2% were negative, and 33% were ambivalent or had no precise opinion.

If the material had been more representative, it might be that the distribution of percentages would have come out in a different way. We simply do not know if the existing material is biased, and if it is, to what extent. But with the information we have, there is no reason for assuming that the pupils of the FGO have any significant points of difference from pupils in the traditional schools.

6.5 What of the "Hawthorne Effect"?

In Chapter 5 we pointed out that we look upon the organization FGO as a social unit where people establish more or less stable relationships with each other to make it easier to achieve certain goals. The fact that FGO, after some twelve years of existence, still is an active experimental school indicates that the members of the school, at least in a moderate sense, succeed in achieving their goals.

When we analyse the school to find out how their goals are achieved, we should probably take into consideration the possibility of any experimental side effect that may make the main effects appear more important than they are. We are referring here to the so-called "Hawthorne Effect" that so often appears in psychological and educational experiments.

In the case of FGO we shall mention two conditions that may produce such an effect:

1. FGO is an experimental school that explicitly defines itself as being different from ordinary schools.
2. Every year FGO receives many groups of visitors from other countries who study the school as an interesting educational experiment.

We are not able to make any exact estimation of the importance of such factors, but we think that the motivation and excitement generated by the above mentioned conditions to some degree may help the school maintain its position as an alternative to the traditional schools.

We believe, however, that in the present study, which is one of many studies made on FGO, we have employed methods and procedures which have hardly created any experimental side effect.

6.6. A Last Word

It is a characteristic of open systems that a lot of changes within the system may take place without the system itself being changed. In fact, we may say that changes within the system are necessary from time to time to preserve the essential qualities or the identity of a system. On the other hand, there are changes on a higher logical level that can change the system as such and make it function differently.

Thus we may speak of at least two different kinds of changes. Watzlawick et al. (1974) refer to these categories as first-order and second-order changes respectively.

When we speak of reform in a conventional school that may lead to a realization of the idea of lifelong education, we are dealing with second-order changes. The introduction of alternative methods of instruction, the involvement of persons from outside school in the learning system, the inclusion of unconventional subjects in the curriculum and so on, are all first-order changes that call for adaptive changes within the system. The system itself, however, may remain essentially the same. A second-order change implying innovation on the next higher logical level, would be to make the methods and procedures themselves a subject of study.

The term *method* denotes manner of proceeding, e.g. in specific teaching and learning activities. *Methodology*, on the other hand, is a concept of the next higher logical type, it is the study of the plurality of methods which are applied in the various teaching and learning activities. It always has to do with teaching and learning, and is not a specification of the steps which must be taken in a given order to achieve a given end. It is, therefore, a *meta*method and stands in the same logical relation to method as a class to one of its members.

If we want to talk *about* language, as linguists and semanticists have to, we need a metalanguage; if we want to deal with communication, this will be a metacommunication and so on. If the members of a school society want to manage their own practices, they must be enabled to deal with these affairs on a metalevel. Tentatively we will contend that a school for lifelong education will differ from other schools in just this respect.

Finally we shall point out that FGO does not exemplify all the ideas of lifelong education. These ideas were not even known to the founders of the school. The principal intention of the founders of FGO was to create an alternative to the traditional school, - an alternative that should be more in line with their ideas of democracy.

BIBLIOGRAPHY

ANGYAL, A.: *Foundations for a Science of Personality.* Cambridge, Mass.: Harvard University Press, 1941.

ARGYLE, M.: *The Psychology of Interpersonal Behaviour.* Harmondsworth, England: Penguin, 1967.

BERTALANFFY, L. von: "The theory of open systems in physics and biology". *Science.* 111 (1950, January 13), pp.23-29.

FEIBLEMAN, J. and FRIEND, J.W.: "The structure and function of organization". *Philosophical Review.* 54 (1945).

GALTUNG, J. and GLEDITSCH, N.P.: "Norge i verdenssamfunnet". In *Det Norske Samfunn*, vol. 2. Oslo: 1975.

GIBB, J.R. and GIBB, L.M.: *Applied Group Dynamics.* Boulder, Colo.:National Training Laboratories, 1955.

HALLEM, A.: "Arbeidsskolepedagogikken i Norge". In Nees, E. (ed.): *Arbeids- og Aktivitetsskolen i Norge, Europa og USA.* Oslo: 1965.

HAREIDE, D.: *The Experimental Gymnasium (Oslo): An Updated Case.* Oslo: 1973. (Mimeographed.)

HAUGE, T.E.: *Forsøksgymnaset i Oslo: En Beskrivende Studie. Skolesjefen i Oslo.* Report No.16. Oslo: Avdeling for pedagogisk utviklingsarbeid, 1972. (Mimeographed.)

HAWES, L.C.: *Pragmatics of Analoguing.* Reading, Mass.: Addison-Wesley, 1975.

HEM, L.: *Forsøksgymnaset: En Studie om Forandring.* Oslo: 1971.

ISRAEL, J.: "Disciplinproblem eller samarbetssvårigheter i Skola". *Vår skole.* (1968), No.10.

JØRGENSEN, M.: *Fra Skoleopprør til Opprørsskole.* Oslo: 1972.

KATZ, D. and Kahn, R.L.: *The Social Psychology of Organizations.* New York: Wiley, 1966.

MILES, M.B.: *Learning to Work in Groups.* New York: Teachers College, 1970.

OECD: *Case Studies of Educational Innovation: Strategies for Innovation in Education.* 4 volumes. Paris: OECD, 1973.

STATISTIK SENTRALBYRÅ *Statistisk årbok 1978.* Oslo: 1978.

TUBBS and MOSS: *Human Communication: An Interpersonal Perspective.* New York: Random House, 1974.

WATZLAWICK, BEAVIN and JACKSON: *Pragmatics of Human Communication.* New York: Norton, 1967.

WATZLAWICK, WEAKLAND and FISH: *Change.* New York: Norton, 1974.

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1. **Lifelong Education and School Curriculum**
   by R. H. Dave. 1973
2. **Lifelong Education and the School**
   Abstracts and Bibliography
   (Bilingual – English and French)
   prepared by R. H. Dave and N. Stiemerling. 1973
3. **Reflections on Lifelong Education and the School**
   edited by R. H. Dave. 1975
4. **Lifelong Education,**
   Schools and Curricula in Developing Countries
   by H. W. R. Hawes. 1975
   (also available in French and Arabic)
5. **Lifelong Education**
   and the Preparation of Educational Personnel
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